

STCG Subcon Subgroup Meeting Minutes

July 22, 1998

Westbay Multi-Level Wells

Bill Black and John Sankey from Westbay Instruments Inc. presented information on their multi-level well technology, which has a long track record in a variety of industries. Westbay is a private company located in Vancouver, B.C. Their business centers around multi-level groundwater monitoring. They were originally funded by DOE at LBL, and have also worked for NASA, USGS, EPA, and Battelle. The technology is usually used for deep problems such as DNAPLs, but they also have applications in the following areas:

- Environmental (9 of 10 EPA regions)
- Water resources management (Southern California)
- Nuclear waste (repository siting studies)
- Geotechnical (monitoring pressure at depth, as in mines).

The Westbay wells can have any number of zones or ports. Hydraulically inflated packers are added wherever needed to separate the various monitoring ports in a well. The wells are mainly used for saturated zones, but they have a Yucca Mountain vadose zone monitoring application in operation that is funded by the county with DOE funds. Some older Westbay wells are installed at B Pond on the Hanford Site, and there are also a couple of wells at the In Situ Redox Manipulation demonstration site.

Plastic wells can be used at depths of 3000-4000 feet. They can provide discrete samples of 1-2 liters or pumped samples, as well as in situ chemical sensing. If samples are needed at only one or two levels, then separate wells may be economical. But when more than three levels of samples are needed, Westbay wells are more cost-effective.

Westbay can team with other sensor technology vendors and insert their instruments into the wells. There are two Westbay well sizes: 1.5 inches and 2.5 inches. Westbay doesn't drill wells; a drilling contractor is used.

Technology Needs Endorsement (Larry Bagaasen)

Larry stated that comments on the draft Subcon technology needs were received from CH2M-Hill, Doug Huston (Oregon Office of Energy), and Gary Ballew (Pacific Rim Enterprise Center). This year's needs were renumbered to be consistent with the numbers used last year. Also, the dates on the needs were changed to August 1998.

Dave Biancosino noted that DOE-HQ wants our waste streams to correspond to Hanford's disposition maps in *Accelerating Cleanup: Paths to Closure* (ACPC). Our Site priority rankings

must also match those in the ACPC document. Dave said that Technology Insertion Points (TIPs) should also be included in the needs statements if possible.

The technology needs were endorsed by the Subgroup. Larry agreed to have the final versions of the technology needs ready to be distributed to the Subgroup and the Management Council members by July 31. John April will present the technology needs to the Management Council at their August meeting.

Science Needs Discussion (Shirley Rawson)

Shirley provided a historical background on the Subcon science needs, describing the quarterly workshops that were held in 1997 and 1998 with the Bechtel engineers and the PNNL scientists to flesh out the science needs. No new science needs have been added this year, since the last set of Subcon science needs was never proposed against.

The Vadose Zone/Groundwater Project science and technology needs will be identified by the end of September. If new needs are identified by the Vadose Zone/Groundwater Project, we can add them to our package later.

Barbara Harper expressed some concerns about the Hanford science needs process. She stated that the S&T roadmaps (gap analysis) is being done before the Vadose Zone/Groundwater Project goals are set. Also, she is concerned that the STCG is not doing a detailed, systematic assessment of science needs for Hanford cleanup. Shirley agreed to meet with Barbara offline to address her concerns about the science needs process. Doug Huston planned to join them by phone.

Attendees

John April (BHI)
Jay Augustenborg (DOE-RL/AMW)
Larry Bagaasen (PNNL)
Gary Ballew (Pacific Rim Enterprise Center)
Dave Biancosino (DOE-RL/STP)
Bill Black (Westbay Instruments Inc.)
Linda Fassbender (PNNL)
Dennis Faulk (EPA)
Dib Goswami (Ecology)
Barbara Harper (Yakama Indian Nation)
Doug Huston (Oregon Office of Energy)
Shirley Rawson (PNNL)
John Sankey (Westbay Instruments Inc.)
Fred Serier (DOE-RL/AME)
Det Wegener (FDH/HAMMER)
Jerry White (BHI)

Next Meeting

The next Subgroup meeting is scheduled for August 19, 1998 in Room 2A-01 of the Bechtel Building. The agenda will include endorsement of the FY99 science needs.